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APPEAL BRIEF**

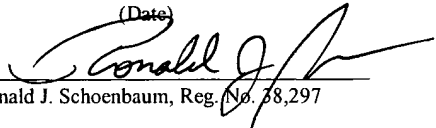
Applicants : Linden, et al.  
App. No : 10/050,579  
Filed : January 15, 2002  
For : CONTENT PERSONALIZATION  
BASED ON ACTIONS PERFORMED  
DURING A CURRENT BROWSING  
SESSION  
Examiner : Kuen S. Lu  
Art Unit : 2167

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November 15, 2005

(Date)

  
Ronald J. Schoenbaum, Reg. No. 38,297**Mail Stop Appeal Brief - Patents**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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Transmitted herewith for filing in the above-identified application are the following enclosures:

- (X) Appeal Brief in 18 pages;
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Appeal Brief	41.20(b)(2)	1402 (\$500)		\$500.00
			<b>TOTAL FEE DUE</b>	<b>\$500.00</b>

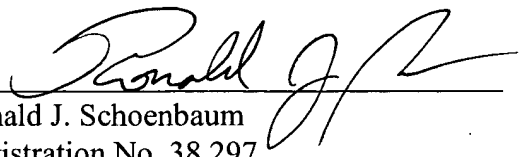
Docket No. : ALEXAI.008A  
Application No. : 10/050,579  
Filing Date : January 15, 2002

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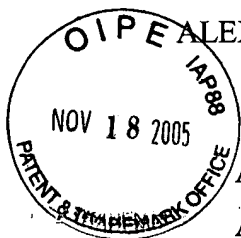
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Dated: November 15, 2005

  
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ALEXA I.008A

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellants : Linden, et. al.  
Appl. No. : 10/050,579  
Filed : January 15, 2002  
For : CONTENT PERSONALIZATION  
BASED ON ACTIONS  
PERFORMED DURING A  
CURRENT BROWSING SESSION  
Examiner : Kuen S. Lu  
Group Art Unit : 2167

**APPEAL BRIEF**

United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Appellants, Applicants in the above-captioned patent application, appeal the rejection of Claims 21-33 and 49-65 set forth in the Final Office Action mailed on July 19, 2005 (hereinafter "the Final Office Action"). A check for the filing fee is enclosed. Please charge any additional fees that may be required now or in the future to Deposit Account No. 11-1410.

**I. REAL PARTY IN INTEREST**

The real party in interest in the present application is Alexa Internet.

**II. RELATED APPEALS AND INTERFERENCES**

No related appeals, interferences or judicial proceedings are currently pending.

**III. STATUS OF CLAIMS**

Claims 21-33 and 49-65, which are attached hereto as an appendix, are currently pending in the application and are the subject of this appeal.

#### **IV. STATUS OF AMENDMENTS**

No amendments were made in response to the Final Office Action.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present application includes three independent claims. Each independent claim is paraphrased below, with citations to corresponding portions of the specification and drawings as required by 37 C.F.R. § 41.37(c)(1)(v). These citations are provided in order to illustrate specific examples and embodiments of the recited claim language, and not to limit the claims. Unless indicated otherwise, reference numbers refer to items illustrated in Figure 14.

Independent Claim 21 is directed to a method for providing recommendations of items to a user. The method comprises:

- using a client component (1402) which runs on the user's computer (34) in conjunction with a web browser (1404) to identify a plurality of items accessed by the user through a plurality of web sites (1406) during a web browsing session (see, e.g., page 46, line 4 to page 47, line 11 and page 56, line 7 to page 57, line 7);
- selecting an additional item based at least upon a degree of relatedness between the additional item and each of the plurality of items (see, e.g., page 5, lines 11-30 and page 47, line 28 to page 48, line 18 and page 57, lines 1-6); and
- recommending the additional item to the user (see, e.g., page 48, lines 19-27 and page 57, lines 6 and 7).

Independent Claim 49 is directed to a method of assisting a user in locating web content that is related to browsing activities performed during a current browsing session (see, e.g., page 5, lines 24-30). The method comprises:

- providing a browser plug-in (1402) that runs on a user computer (34) in association with a web browser (1404) (see, e.g., page 46, lines 4-16);

- during a current browsing session in which a user accesses a plurality of web sites (1406), receiving from the browser plug-in (1402), at a server which is separate from the user computer, at least an indication of the plurality of web sites (1406) accessed by the user (see, e.g., page 46, lines 4 to page 47, line 11);
- selecting a web address to suggest to the user, taking into consideration identities of each of the plurality of web sites (1406) accessed by the user during the current browsing session (see, e.g., page 47, line 28 to page 48, line 18); and
- transmitting the web address to the user computer (34) during the current browsing session (see, e.g., page 48, lines 19-27; and “recommendation web page” 1420 in Figure 14).

Independent Claim 60 is directed to a method of assisting a user in locating web content related to a current browsing session. The method comprises:

- at a server, receiving clickstream data from a user computer (34), said clickstream data reflective of browsing actions performed by a user of the user computer across a plurality of web sites (1406) during a current browsing session, said server being separate from servers of said plurality of web sites (see, e.g., page 46, line 4 to page 47, line 11);
- storing the clickstream data in a memory of the server during the browsing session (see, e.g., page 46, lines 23-31);
- selecting at least one web address to recommend to the user during the browsing session such that selection of the at least one web address takes into consideration identities of each of the plurality of web sites (1406) accessed by the user during the browsing session (see, e.g., page 47, line 28 to page 48, line 18); and
- transmitting the at least one web address to the user computer (34) during the browsing session (see, e.g., page 48, lines 19-27; and “recommendation web page” 1420 in Figure 14).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The following ground for rejection is to be reviewed on appeal: the rejection of Claims 21-26, 28-33 and 49-65 under 35 U.S.C. § 103(a) as being unpatentable over Bunch (U.S. Pat. 6,795,856) in view of Hosken (U.S. Pat. 6,433,579) (collectively “the applied references”). In connection with this ground for rejection, Appellants have identified certain dependent claims as standing or falling with the respective claims from which they depend; by doing so, Appellants do not imply that the limitations recited in these claims are taught or suggested by the applied references.

Appellants are not requesting a review of the rejection of dependent Claim 27 over the combination of Bunch, Hosken and Ullmann et al. (U.S. Pat. 6,683,579). Thus, Appellants submit that Claim 27 properly stands or falls with independent Claim 21, from which it depends.

## **VII. ARGUMENT**

Claims 21-26, 28-33 and 49-65 stand rejected on obviousness grounds over Bunch in view of Hosken. Appellants will treat the applied references as prior art for purposes of this appeal, but reserve the right to disqualify one or both references as prior art in the future.

Bunch discloses a system for enabling a company to monitor employee Internet usage to ensure that employees are not excessively engaging in unproductive or undesirable activity. This system makes use of a monitoring component which runs on users’ PCs, and which logs and reports Internet usage data to a server. Bunch makes no mention whatsoever of using the Internet usage data reported by the monitoring component to select web sites, web pages, or any other types of items to recommend to users. Hosken discloses a system that uses a combination of content-based filtering and collaborative filtering to select media content items, such as music items, to recommend to users.

As set forth in MPEP 2142, a prima facie case of obviousness can be established only if three basic criteria are met:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

MPEP 2142 at page 2100-134, Rev. 3, August 2005 (case citation omitted, emphasis original).

As set forth below, Appellants respectfully submit that none of these three requirements is met, and that the obviousness rejection is therefore improper.

#### Independent Claim 21

a. Motivation to combine

To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching, in the prior art, of the desirability of making the specific combination. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); and MPEP 2143.01. Appellants respectfully submit that the Examiner has not identified any motivation, suggestion or teaching in the prior art of the desirability of combining Bunch and Hosken, and thus has failed to establish a *prima facie* case of obviousness.

In connection with this issue, the Examiner asserts that the combination of Bunch and Hosken “would have enabled a system to monitor and record [a] user’s interested items and further evaluate, correlate and collaborate for constructing an extended set of items to recommend to the users.” Final Office Action at page 3. This asserted suggestion of the combination’s desirability, however, does not come from either of the references. In this regard, Bunch says nothing about using the collected Internet usage data of employees to recommend web sites, web addresses, or any other type of item to the monitored employees. In addition, Hosken says nothing about using Internet usage data, as collected by a client-side monitoring component such as that of Bunch, to make recommendations to users. Thus, nothing can be

**Appl. No.** : 10/050,579  
**Filed** : January 15, 2002

taken from either reference that would suggest incorporating Bunch's client-based Internet usage monitoring techniques into the media-item recommendations system of Hosken.

Because the Examiner has not identified in the references a motivation, suggestion or teaching of the desirability of combining Bunch and Hosken, and because indeed no such motivation, suggestion or teaching is provided by the references, the obviousness rejection is improper.

b. Reasonable expectation of success

Appellants also respectfully submit that the obviousness rejection of Claim 21 is improper because Bunch and Hosken could not, at the time of the invention, have been combined with a reasonable expectation of success. In this regard, Hosken's system makes use of media-item attribute data (artist names, genres, years of creation, etc.), as obtained from an industry database, to select media items to recommend to users. See Hosken at, e.g., col. 2, lines 32-37 and col. 8, line 53 to col. 9, line 22. Thus, Hosken's system apparently would not be capable of recommending the URLs recorded in Bunch's Internet usage logs without an equivalent repository of attribute data for such URLs. Neither Bunch nor Hosken, however, explains how such URL attribute data could be generated or obtained.

In view of this deficiency, one skilled in the art would not have been able to combine Bunch and Hosken, as asserted by the Examiner, with a reasonable expectation of success. The obviousness rejection is therefore improper.

c. Teaching or suggestion of all claim limitations

Appellants additionally respectfully submit that the rejection of independent Claim 21 is improper because Bunch and Hosken do not teach or suggest all of the limitations of Claim 21. For example, Bunch and Hosken do not teach or suggest "selecting an additional item based at least upon a degree of relatedness between the additional item and each of the plurality of items [accessed by the user]." In connection with these limitations, the Examiner relies on col. 9, lines 39-42, and col. 10, lines 39-43 of Hosken. These portions of Hosken do not, however, teach or suggest a method that involves selecting an additional item based at least upon a degree of relatedness between the additional item and each of the plurality of items [accessed by the user during the web browsing session].



**Appl. No.** : 10/050,579  
**Filed** : January 15, 2002

For the foregoing reasons, Appellants respectfully submit that the obviousness rejection of independent Claim 21 is improper and should be reversed.

Dependent Claims 22 and 23

Claims 22 and 23 depend from, and stand or fall with, independent Claim 21.

Dependent Claim 24

Because Claim 24 depends from Claim 21, the rejection of Claim 24 is improper for the reasons set forth above for Claim 21. In addition, the rejection of Claim 23 is improper because the applied references do not teach or suggest that the “the additional item is recommended to the user through the client component,” as recited in Claim 24. As indicated by Claim 21, this “client component” is a component “which runs on the user’s computer in conjunction with a web browser....” Although Bunch discloses such a client component 26, nothing in either Bunch or Hosken suggests using this client component to recommend an item as set forth in Claim 24.

Dependent Claims 25, 26, 28 and 29

Claims 25, 26, 28 and 29 depend from, and stand or fall with, Claim 21.

Dependent Claim 30

Because Claim 30 depends from Claim 21, the rejection of Claim 30 is improper for the reasons set forth above for Claim 21. In addition, the rejection of Claim 30 is improper because the applied references do not teach or suggest the following limitations recited in Claim 30: “wherein using the client component to identify a plurality of items comprises: receiving from the client component identifications of a plurality of web addresses browsed by the user during the web browsing session; and using an association of web addresses with items to identify the plurality of items based upon the plurality of web addresses.” The Final Office Action does not fully address these limitations of Claim 30.

Dependent Claims 31-33

Dependent Claims 31-33 depend from, and stand or fall with, Claim 30.

Independent Claim 49

The rejection of independent Claim 49 is improper because the Examiner has not identified a motivation, suggestion or teaching of the desirability of combining Bunch and Hosken. As explained above in connection with independent Claim 21, Bunch says nothing about using the collected Internet usage data of employees to recommend web sites, web

**Appl. No.** : **10/050,579**  
**Filed** : **January 15, 2002**

addresses, or any other type of item to the monitored employees. In addition, Hosken says nothing about using Internet usage data, as collected by a client-side monitoring component such as that of Bunch, to make recommendations to users. Thus, nothing can be taken from either reference that would suggest incorporating Bunch's client-based Internet usage monitoring techniques into the media-item recommendations system of Hosken.

The rejection of independent Claim 49 is also improper because Bunch and Hosken could not, at the time of the invention, have been combined with a reasonable expectation of success. As explained above in connection with independent Claim 21, Hosken's system makes use of media-item attribute data (artist names, genres, years of creation, etc.), as obtained from an industry database, to select media items to recommend to users. See Hosken at, e.g., col. 2, lines 32-37 and col. 8, line 53 to col. 9, line 22. Thus, Hosken's system apparently would not be capable of recommending the URLs recorded in Bunch's Internet usage logs without an equivalent repository of attribute data for such URLs. Neither Bunch nor Hosken, however, explains how such URL attribute data could be generated or obtained. In view of this deficiency, one skilled in the art would not have been able to combine Bunch and Hosken, as asserted by the Examiner, with a reasonable expectation of success.

Finally, the rejection of independent Claim 49 is improper because Bunch and Hosken do not teach or suggest all of the limitations of the claims. For example, Bunch and Hosken do not teach or suggest "selecting a web address to suggest to the user, taking into consideration identities of each of the plurality of web sites accessed by the user during the current browsing session." Appellants respectfully disagree with the Examiner's assertion that this feature of Claim 49 is taught or suggested by col. 9, lines 39-42, and col. 10, lines 39-43 of Hosken.

For the foregoing reasons, Appellants respectfully submit that the rejection of independent Claim 49 is improper and should be reversed.

**Dependent Claim 50**

Claim 50 depends from, and stands or falls with, Claim 49.

**Dependent Claim 51**

Because Claim 51 depends from Claim 49, the rejection of Claim 51 is improper for the reasons set forth above for Claim 49. In addition, the rejection of Claim 51 is improper because the applied references do not teach or suggest the following limitations recited in Claim 51:

**Appl. No.** : 10/050,579  
**Filed** : January 15, 2002

“wherein the browser plug-in presents the web address to the user during the browsing session.” In connection with these limitations, the portion of Bunch relied on by the Examiner—namely col. 8, lines 47-54—merely describes a process of recording a web address accessed by the user, and says nothing about presenting a selected/suggested web address to the user.

#### Dependent Claim 52

Because Claim 52 depends from Claim 51, the rejection of Claim 52 is improper for the reasons set forth above for Claim 51. In addition, the rejection of Claim 52 is improper because the applied references do not teach or suggest the following limitations recited in Claim 52: “wherein the browser plug-in provides an option for the user to deselect one or more of the plurality of accessed web sites to cause a recommendation of said web address to be refined.” Appellants respectfully disagree with the Examiner’s assertion that the feature recited in Claim 52 is equivalent to Hosken’s automated process for taking into consideration the music style currently selected by the user.

#### Dependent Claim 53

Because Claim 53 depends from Claim 49, the rejection of Claim 53 is improper for the reasons set forth above for Claim 49. In addition, the rejection of Claim 53 is improper because the applied references do not teach or suggest that “the web address is an address of a target web site that is determined to be the most closely related to the plurality of web sites accessed by the user during the current browsing session.” In this regard, Hosken’s recommendations do not appear to be generated by identifying a media content item that is the most closely related to a plurality of media content items accessed by the user during a current browsing session. Thus, even if Hosken were combined with Bunch so as to provide recommendations of web addresses, the combination still would not fall within the scope of, or render obvious, Claim 53.

#### Dependent Claim 54

Because Claim 54 depends from Claim 49, the rejection of Claim 54 is improper for the reasons set forth above for Claim 49. In addition, the rejection of Claim 54 is improper because the applied references do not teach or suggest that “the web address is an address of a target web site, and is selected such that a selection decision takes into consideration a degree to which the target web site is related to each of the plurality of accessed web sites.” In this regard, Hosken’s recommendations do not appear to take into consideration a degree to which a target media

**Appl. No.** : 10/050,579  
**Filed** : January 15, 2002

content item is related to each of a plurality of media content items accessed during a current browsing session. Thus, the combination of Hosken and Bunch would not teach or suggest the limitation of Claim 54.

Dependent Claims 55 and 56

Claims 55 and 56 depend from, and stand or fall with, Claim 54.

Dependent Claim 57

Claim 57 depends from, and stands or falls with, Claim 49.

Dependent Claim 58

Because Claim 58 depends from Claim 49, the rejection of Claim 58 is improper for the reasons set forth above for Claim 49. In addition, the rejection of Claim 58 is improper because the applied references do not teach or suggest the following limitations of Claim 58: "wherein selection of the web address takes into account frequencies with which different web sites have been accessed by users during the same browsing session, as determined by analyzing session clickstreams of a plurality of users." Bunch, which was relied on by the Examiner in connection with these limitations, makes no attempt to determine, and does not take into consideration, the frequencies with which different web sites have been access by users during the same browsing session. Indeed, there apparently would be no reason to take such frequency information into consideration in the context of the Internet usage monitoring system of Bunch.

Dependent Claim 59

Claim 59 depends from, and stands or falls with, Claim 49.

Independent Claim 60

The rejection of independent Claim 60 is improper because the Examiner has not identified a motivation, suggestion or teaching of the desirability of combining Bunch and Hosken. As explained above in connection with independent Claims 21 and 49, Bunch says nothing about using the collected Internet usage data of employees to recommend web sites, web addresses, or any other type of item to the monitored employees. In addition, Hosken says nothing about using Internet usage data, as collected by a client-side monitoring component such as that of Bunch, to make recommendations to users. Thus, nothing can be taken from either reference that would suggest incorporating Bunch's client-based Internet usage monitoring techniques into the media-item recommendations system of Hosken.

**Appl. No.** : **10/050,579**  
**Filed** : **January 15, 2002**

The rejection of independent Claim 60 is also improper because Bunch and Hosken could not, at the time of the invention, have been combined with a reasonable expectation of success. As explained above in connection with independent Claims 21 and 49, Hosken's system makes use of media-item attribute data (artist names, genres, years of creation, etc.), as obtained from an industry database, to select media items to recommend to users. See Hosken at, e.g., col. 2, lines 32-37 and col. 8, line 53 to col. 9, line 22. Thus, Hosken's system apparently would not be capable of recommending the URLs recorded in Bunch's Internet usage logs without an equivalent repository of attribute data for such URLs. Neither Bunch nor Hosken, however, explains how such URL attribute data could be generated or obtained. In view of this deficiency, one skilled in the art would not have been able to combine Bunch and Hosken, as asserted by the Examiner, with a reasonable expectation of success.

Finally, the rejection of independent Claim 60 is improper because Bunch and Hosken do not teach or suggest all of the limitations of the claims. For example, Bunch and Hosken do not teach or suggest "selecting at least one web address to recommend to the user during the browsing session such that selection of the at least one web address takes into consideration identities of each of the plurality of web sites accessed by the user during the browsing session." Appellants respectfully disagree with the Examiner's assertion that this feature of Claim 60 is taught or suggested by the abstract, col. 9, lines 39-42, and col. 10, lines 39-43 of Hosken.

For the foregoing reasons, Appellants respectfully submit that the rejection of independent Claim 60 is improper and should be reversed.

**Dependent Claim 61**

Claim 61 depends from, and stands or falls with, Claim 60.

**Dependent Claim 62**

Because Claim 62 depends from Claim 61 (which depends from Claim 60), the rejection of Claim 62 is improper for the reasons set forth above for Claim 60. In addition, the rejection of Claim 62 is improper because the applied references do not teach or suggest "wherein the browser plug-in provides an option for the user to deselect one or more accessed web locations represented in the clickstream data to cause a recommendation of the at least one web address to be refined." Appellants respectfully disagree with the Examiner's assertion that this feature is

**Appl. No.** : 10/050,579  
**Filed** : January 15, 2002

equivalent to Hosken's automated process for taking into consideration the music style currently selected by the user.

Dependent Claim 63

Claim 63 depends from, and stands or falls with, Claim 60.

Dependent Claim 64

Because Claim 64 depends from Claim 60, the rejection of Claim 64 is improper for the reasons set forth above for Claim 60. In addition, the rejection of Claim 64 is improper because the applied references do not teach or suggest the following limitations of Claim 64: "wherein the at least one web address includes an address of a target web site that is determined to be the most closely related to the plurality of web sites accessed by the user." In this regard, Hosken's recommendations do not appear to be generated by identifying a media content item that is the most closely related to a plurality of media content items accessed by the user during a current browsing session. Thus, even if Hosken were combined with Bunch so as to provide recommendations of web pages, the combination still would not fall with the scope of, or render obvious, Claim 64.

Dependent Claim 65

Because Claim 65 depends from Claim 60, the rejection of Claim 65 is improper for the reasons set forth above for Claim 60. In addition, the rejection of Claim 65 is improper because the applied references do not teach or suggest the following limitations of Claim 65: "wherein the at least one web address is selected so as to recommend one or more web sites that are collectively related to a plurality of web locations accessed during the current browsing session." Because Hosken apparently does not attempt to recommend one or more media content items that are collectively related to a plurality of media content items accessed during a current browsing session, the combination of Hosken and Bunch does not suggest the limitations added by Claim 65.

Appl. No. : 10/050,579  
Filed : January 15, 2002

**VIII. CONCLUSION**

For the reasons set forth above, the rejections of Claims 21-33 and 49-65 are improper and should be reversed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 11-15-05

By: 

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CLAIMS APPENDIX

21. (original) A method for providing recommendations of items to a user, the method comprising:
- using a client component which runs on the user's computer in conjunction with a web browser to identify a plurality of items accessed by the user through a plurality of web sites during a web browsing session;
  - selecting an additional item based at least upon a degree of relatedness between the additional item and each of the plurality of items; and
  - recommending the additional item to the user.
22. (original) The method of Claim 21, wherein the additional item is a web page, a web site or a web address.
23. (original) The method of Claim 21, wherein the plurality of items are web pages, web sites or web addresses.
24. (original) The method of Claim 21, wherein the additional item is recommended to the user through the client component.
25. (original) The method of Claim 21, wherein the degree of relatedness is based upon a score that takes into account browsing history data for a plurality of users.
26. (original) The method of Claim 21, wherein the degree of relatedness is based upon a commonality index that takes into account a number of co-occurrences of accesses of a pair of items within each of a plurality of web browsing sessions.
27. (original) The method of Claim 21, wherein the degree of relatedness is based upon a minimum sensitivity determination.
28. (original) The method of Claim 21, wherein the additional item is selected by a server component that receives an identification of the plurality of items from the client component.
29. (original) The method of Claim 21, wherein the additional item is a product.



**Appl. No.** : **10/050,579**  
**Filed** : **January 15, 2002**

30. (original) The method of Claim 21, wherein using the client component to identify a plurality of items comprises:

receiving from the client component identifications of a plurality of web addresses browsed by the user during the web browsing session; and  
using an association of web addresses with items to identify the plurality of items based upon the plurality of web addresses.

31. (original) The method of Claim 30, wherein the association of web addresses with items is based at least upon content-based analysis of web pages.

32. (original) The method of Claim 30, wherein the association of web addresses with items is based at least upon structure-based analysis of web pages.

33. (original) The method of Claim 30, wherein the association of web addresses with items is based at least upon user identification of items on web pages.

34-48. (canceled)

49. (previously presented) A method of assisting a user in locating web content that is related to browsing activities performed during a current browsing session, the method comprising:

providing a browser plug-in that runs on a user computer in association with a web browser;

during a current browsing session in which a user accesses a plurality of web sites, receiving from the browser plug-in, at a server which is separate from the user computer, at least an indication of the plurality of web sites accessed by the user;

selecting a web address to suggest to the user, taking into consideration identities of each of the plurality of web sites accessed by the user during the current browsing session; and

transmitting the web address to the user computer during the current browsing session.

50. (previously presented) The method of Claim 49, wherein the server is separate from servers of the plurality of web sites.

51. (previously presented) The method of Claim 49, wherein the browser plug-in presents the web address to the user during the browsing session.

52. (previously presented) The method of Claim 51, wherein the browser plug-in provides an option for the user to deselect one or more of the plurality of accessed web sites to cause a recommendation of said web address to be refined.

53. (previously presented) The method of Claim 49, wherein the web address is an address of a target web site that is determined to be the most closely related to the plurality of web sites accessed by the user during the current browsing session.

54. (previously presented) The method of Claim 49, wherein the web address is an address of a target web site, and is selected such that a selection decision takes into consideration a degree to which the target web site is related to each of the plurality of accessed web sites.

55. (previously presented) The method of Claim 54, wherein the degree to which the target web site is related to each of the plurality of accessed web sites is determined by accessing a data structure that stores pre-generated data values reflective of degrees to which specific web sites are related.

56. (previously presented) The method of Claim 54, wherein selection of the web address takes into consideration a degree to which the target web site is collectively related to the plurality of web sites accessed by the user.

57. (previously presented) The method of Claim 49, wherein the web address is an address of a target web page, and is selected taking into consideration a degree to which the target web page is related to each of a plurality of web pages accessed by the user while browsing the plurality of web sites.

58. (previously presented) The method of Claim 49, wherein selection of the web address takes into account frequencies with which different web sites have been accessed by users during the same browsing session, as determined by analyzing session clickstreams of a plurality of users.

59. (previously presented) The method of Claim 49, wherein the web address is one of a plurality of web addresses selected to concurrently recommend to the user.

60. (previously presented) A method of assisting a user in locating web content related to a current browsing session, the method comprising:

at a server, receiving clickstream data from a user computer, said clickstream data reflective of browsing actions performed by a user of the user computer across a plurality

of web sites during a current browsing session, said server being separate from servers of said plurality of web sites;

storing the clickstream data in a memory of the server during the browsing session;

selecting at least one web address to recommend to the user during the browsing session such that selection of the at least one web address takes into consideration identities of each of the plurality of web sites accessed by the user during the browsing session; and

transmitting the at least one web address to the user computer during the browsing session.

61. (previously presented) The method of Claim 60, wherein the clickstream data is transmitted from the user computer to the server under the control of a browser plug-in that runs on the user computer.

62. (previously presented) The method of Claim 61, wherein the browser plug-in provides an option for the user to deselect one or more accessed web locations represented in the clickstream data to cause a recommendation of the at least one web address to be refined.

63. (previously presented) The method of Claim 60, wherein the at least one web address is selected using a previously-generated mapping structure that maps web addresses to related web addresses.

64. (previously presented) The method of Claim 60, wherein the at least one web address includes an address of a target web site that is determined to be the most closely related to the plurality of web sites accessed by the user.

65. (previously presented) The method of Claim 60, wherein the at least one web address is selected so as to recommend one or more web sites that are collectively related to a plurality of web locations accessed during the current browsing session.

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**EVIDENCE APPENDIX**

None

**RELATED PROCEEDINGS APPENDIX**

None